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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,704	09/28/2001	Tetsujiro Kondo	450100-03501	6412
20999 7590 04/20/2007 FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER SALTARELLI, DOMINIC D	
			ART UNIT	PAPER NUMBER
			2623	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/20/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/966,704	Applicant(s) KONDO ET AL.	
	Examiner Dominic D. Saltarelli	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 7, and 21-24 have been considered but are moot in view of the new grounds of rejection.
2. Further, applicants did not traverse the examiner's usage of official notice to disclose that the use of bandpass filters to pass specific bands of audio data for processing is well known in the art. This is taken as an admission of the fact herein as per MPEP 2144.03.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 7-9, 12, 13, and 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Hennes (6,665,985, of record).

Regarding claims 1, 7, 8, 9, and 21-24, Hennes discloses an audience response determination apparatus for determining an audience response (col. 6, lines 27-67), comprising:

overall state detection means for detecting the overall state of an audience (general audience detection means, col. 6, lines 45-49);

individual state detection means for detecting the individual states of the members of the audience (individual detection means, col. 6, lines 36-41); and

determination means for determining the audience response on the basis of information detected by said overall state detection means and by said individual state detection means (col. 6, lines 49-52),

wherein said determination means for determining the audience response comprises an audience state determination unit for estimating the audience response based upon identifying values of respective determination signals and auxiliary information (the show-control device uses the detected audience information [determination signals] and pre-determined parameters [auxiliary information] to control the program being played, col. 6, lines 49-64),

wherein said auxiliary information indicates a current state of playback being presented to said audience (an inherent step, because the current state of playback must be considered when adjusting playback parameters in order to ensure the seamless flow of content being presented to the audience as disclosed, col. 7, lines 1-13, in other words, the system must consider the current state of playback of content in order to accurately evaluate the audience's response to said content so that the next sequence of content can be intelligently generated) and distinguishes specific content as being movie content information (e.g. MPEG2 video, col. 6, lines 54-57); and

control means for controlling the operation of said playback means based on the audience response determined by said determination means (col. 7, lines 1-13).

Regarding claims 3 and 12 Hennes discloses the apparatus and system of claims 1 and 7, wherein said overall state detection means collects sounds uttered by the entire audience and detects the overall state of the audience based on the sounds collected (col. 6, lines 45-49).

Regarding claim 13, Hennes discloses the system of claims 12, including reduction means for reducing the effect of sound data played back by and output from said playback means (special effects devices, col. 7 line 14 – col. 8 line 2) wherein said overall state detection means detects the overall bodily state of said audience by reducing the effect of said sound data (the sensors are constantly monitoring the audience, and thus after an effect has been applied [reduction of sound], the corresponding audience response is monitored by the detection means).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 4-6, 10, 11, and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hennes.

Regarding claims 2 and 10, Hennes discloses the apparatus and system of claims 1 and 7, but fail to disclose said overall state detection means takes an image of the entire audience and detects the overall bodily state of the audience based on the image taken.

Examiner takes official notice that use of imaging technology and image recognition means are notoriously well known in the art for determining the state and responsiveness of a viewing audience.

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus and system of Hennes to include evaluating an image taken of the entire audience to detect the overall bodily state of the audience. Hennes provides for rudimentary bodily state detection devices (motion sensors and beam-interrupt devices, col. 6, lines 45-49), and the additional use of a camera would be the next logical step of providing a more sophisticated and more accurate evaluation of the audience.

Regarding claims 4-6, 17, 19, and 20, Hennes discloses the apparatus and system of claims 1 and 7, but fails to disclose the individual state detection means detects a load applied to audience member's seats and the stepping force of their feet.

Examiner takes official notice that the use of load bearing sensors to detect the movements of audience members is well known in the art. In a theater where audiences would sit, a load bearing sensor in the seat would detect their

seated motions, and foot sensors would detect corresponding activity, providing a more complete set of data for analysis regarding the state of individual audience members.

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus and system of Hennes to for the individual state detection means detects a load applied to audience member's seats and the stepping force of their feet, providing a more complete set of data for analysis regarding the state of individual audience members. Hennes provides for rudimentary bodily state detection devices (motion sensors and beam-interrupt devices, col. 6, liens 45-49), and the additional use of load bearing sensors would be the next logical step of providing a more sophisticated and more accurate evaluation of the audience.

Regarding claim 11, Hennes discloses the system of claim 10, including reduction means for reducing the effect of video data played back by and output from said playback means (special effects devices, col. 7 line 14 – col. 8 line 2) wherein said overall state detection means detects the overall bodily state of said audience by reducing the effect of said video data (the sensors are constantly monitoring the audience, and thus after an effect has been applied [reduction of video], the corresponding audience response is monitored by the detection means).

Regarding claims 14 and 15, Hennes discloses the system of claim 12, but fails to disclose the overall state detection means detects the overall state of the audience by comparing the collected sounds with a reference sound level which varies on the basis of the audience size.

Examiner takes official notice that the use of size variant thresholds for sounds detection are well known in the art, as with any sound detection system, there is an ever-present element of background noise which does not contribute to any meaningful analysis of the data, and necessitating the use of a threshold to account for noise, and this threshold is adjusted based on audience size, because a larger audience would result in more background noise.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Hennes in the overall state detection means comparing the collected sounds with a reference sound level which varies on the basis of the audience size, for the benefit of compensating for background noise.

Regarding claim 16, Hennes discloses the system of claim 12, but fails to disclose a filter which passes a predetermined audio band, wherein said overall state determination means detects the overall state of the audience based on the sound passed through said filter.

The use of filters for passing predetermined audio bands are well known in the art, as these are another means by which background noise may be removed from an analysis of recorded sounds.

It would have been obvious at the time to a person of ordinary skill in the art to modify the system disclosed by Hennes to include a filter which passes a predetermined audio band, wherein said overall state determination means detects the overall state of the audience based on the sound passed through said filter, for the benefit of removing background noise.

Regarding claim 18, Hennes discloses the system of claim 17, wherein the system includes an auxiliary information input means for inputting the auxiliary information (this is an inherent and necessary feature, as the predetermined criteria for adjusting the display of content are subject to change depending on the content to be presented, and therefore there must be an input means for programming the system with said predetermined criteria for each new collection of content).

Conclusion

6. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2623

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic D. Saltarelli whose telephone number is (571) 272-7302. The examiner can normally be reached on Monday - Friday 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DS



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